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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,244	08/18/2003	Stephen John Dyks	F3314(C)	3282
201 7590 11/10/2009 UNILEVER PATENT GROUP 800 SYLVAN AVENUE AG West S. Wing ENGLEWOOD CLIFFS, NJ 07632-3100			EXAMINER BEKKER, KELLY JO	
			ART UNIT 1794	PAPER NUMBER
			NOTIFICATION DATE 11/10/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentgroupus@unilever.com

### Office Action Summary

**Application No.**

10/643,244

**Applicant(s)**

DYKS ET AL.

**Examiner**

KELLY BEKKER

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-10 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 13-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

Amendments made 10/6/09 have been entered.  
Claims 1, 3-10, and 13-16 are pending.

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on October 6, 2009 has been entered.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites, "The process according to claim 1 wherein the frozen aerated product has an overrun above 40%." Claim 1, from which claim 16 depends recites, "a frozen aerated product having an overrun of between 30% and 130%". As the term "above 40%" encompasses the range of 40% to over 130%, the limitations of claim 16 appear to conflict with the limitations from claim 1; for example, the limitations of claim 16 encompass 140%, which would not be encompassed by 30-130% as recited in claim 1. Thus, the claim is unclear as it is unknown whether claim 16 intends to recite for example, "over 40% up to 130%" or if the claim intends to broadly recite "over 40%" and be written in independent form so that it does not conflict with claim 1 or if the claim has some other meaning.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The 103(a) rejection of claims 1-13 as being unpatentable over) Ezaki (JP App # 60230711) in view of Hui (ed.) (Dairy Science and Technology Handbook) has been withdrawn in light of applicant's amendments made October 6, 2009.

Claims 1, 3-10 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over) Ezaki (JP App # 60230711) in view of the combination of Hui (ed.) (Dairy Science and Technology Handbook) and Martinez et al (EP 0864256 A2).

Ezaki discloses of a method for producing a molded ice cream product, i.e. an aerated confection, comprising;

- a. Providing two separate forming elements,
- b. Providing at least one open cavity on a surface of each forming element,
- c. Providing filling devices for filling said cavities
- d. Filling two cavities, one on each forming element

Where in:

- i. The two cavities are moved opposite one another and the frozen aerated product in each cavity is pressed against the frozen aerated product of the other cavity

Ezaki teaches that the two separate forming elements are a pair of rollers wherein each roller has a multiplicity of open cavities on the surface, and the rollers counter rotate so that the respective cavities in the two forming elements lie opposite one another and the frozen aerated products of each cavity are pushed toward one another. Ezaki teaches that the filling device has an output for each forming element. Refer specifically to Figure 1, Page 2 lines 19-24, page 4 line 15 through page 5 line 11. Ezaki teaches that the product has a temperature of -7C when filled into the open cavities (translation page 8, lines 24-25).

Specifically regarding the product as expanded outside the filling cavity, when referring to Figure 1, Ezaki teaches that there is a space between the sliding surface

and the mold cavities (Page 4 lines 15-20), thus teaching that there is space to allow the confection to expand outside the open cavity. Ezaki teaches that the confection fills not only the depressions or molds (Figure 1, 17 and 8), but also the grooves (Figure 1, 26b). Refer specifically to page 9 lines 11-15. Thus, Ezaki teaches that the frozen confection, which includes ice cream, is outside the open cavity prior to the open cavities moving towards one another and closing as recited in claim 1, c and claim 13, c. Applicant claims a frozen aerated confection and discloses ice cream as the frozen aerated confection in the specification; applicant claims that the confection is "allowed" to expand and does not require any steps to provoke or excite the expansion; thus, it would be an inherent property of the confection or ice cream to expand when allowed. Since Ezaki teaches of substantially the same type of confection, i.e. an ice cream, as instantly claimed by applicant and teaches that there is sufficient space for the confection to expand, one of ordinary skill in the art at the time the invention was made would expect the confection as taught by Ezaki to expand outside its open cavity as instantly claimed absent any clear and convincing arguments and/or evidence to the contrary. Applicant is reminded that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Additionally, water was known as a primary ingredient in frozen confections, including ice creams, and water was known to expand upon freezing, as the ice cream further solidified in the chilled mold as taught by Ezaki in view of Martinez (as would have been obvious, as discussed below), one of ordinary skill in the art would further expect that the confectionary product expand as instantly claimed.

Ezaki is silent to the overrun of the frozen confection as about 30-130% as recited in claims 1 and 13, preferably over 40% as recited in claim 16, to the molds rotated at variable rotational speeds as recited in claim 4, to the location of the molds at

the minimum and maximum rotational speed of the mold as recited in claims 5-10, and to the forming elements in the mold as at a temperature below -80C as recited in claim 14, wherein the elements are cooled with liquid nitrogen as recited in claim 15.

Hui discloses of novelty equipment utilized for ice creams. Hui teaches that the sales performance of novelties has been and continues to be strong. Hui teaches the process of filling molds with expanded ice cream products (i.e. ice cream with overrun) is performed at high speeds. Hui teaches that with molding, a pump arrangement is included. Hui teaches that when pumping it is effective to produce a product that melts more slowly and retains more overrun. Hui teaches of a savings for a 2.75 fluid ounce bar (i.e. mould) at a 65% overrun. Refer specifically to Pages 251 and 252.

Martinez et al (Martinez) teaches a process for the manufacture of frozen ice confections, including ice creams, in a split molds (abstract paragraph 57 and page 2 lines 47-48). Martinez teaches that the molds, i.e. the forming elements, are pre-cooled to below -50C, including below -100C by the use of a cryogenic liquid, typically nitrogen (abstract and page 3 lines 3-12). Martinez teaches that the cooled mold allows for ready release of the confectionary product from the mold (page 2 lines 10-21).

Regarding the overrun rate, it would have been obvious to one skilled in the art at the time the invention was made to include an overrun of 65% since Hui teaches that overrun ice cream products which are molded and extruded at 65% increase the amount of the final product (or save a portion of the product that could be lost). To select a particular percentage of overrun would have been obvious depending on the particular degree of savings desired.

Regarding the rotation speed of the rollers, specifically variable rotational speeds and the rotational speed of both the rollers at a stop or minimum speed when the filling device is over a mold cavity and two filled mold cavities face each other, and at a maximal value when the filling device is between two mold cavities, it would have been obvious to one of ordinary skill in the art at the time the invention was made to stop both the rollers, i.e. to be at a minimal rotational value, at the same time when the filling device is over a mold cavity and two filled mold cavities face each other so that the mold cavities could be properly filled (i.e. without spillage, to the correct level, etc) and so that

the frozen confection material within the mold cavities can solidify and expand to take the shape of the mold cavity. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the maximal rotational value of the rollers to be when the filling device is between two mold cavities, in order to expedite the processing, such that there is minimal lag time between the fillings. One would have been further motivated to vary the rotation speeds depending on the desired degree of filling and pressure in the molding cavity. To determine appropriate rotation speed of a circular mold for filling depending on the molding apparatus and filling to be molded would be routine practice of one of ordinary skill in the art at the time the invention was made.

Regarding the forming elements in the mold as at a temperature below -80C, wherein the elements are cooled with liquid nitrogen, it would have been obvious to one of ordinary skill in the art at the time the invention was made to cool the forming elements with liquid nitrogen to below -50C, including -100C in order to keep the confectionary products frozen and allow for easy release of the confectionary product from the mold as taught by Martinez. One would have been further motivated to use liquid nitrogen to cool the forming elements since Martinez teaches that liquid nitrogen is typically used to cool the molds and thus one of ordinary skill in the art at the time the invention was made would expect that the liquid nitrogen be readily available and affordable.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-10, and 13-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as not patentably distinct from claims 1-4 of commonly assigned copending Application No. 11/891,208 ('208). Although the conflicting claims are not identical, they are not patentably distinct from each other because both are directed towards a process of manufacturing frozen aerated products comprising providing two separate forming elements with forming cavities, filling the two open cavities with a product having an overrun within the range 30-130%, allowing the product to expand outside the cavity, then moving the two open cavities opposite one another so that the product of one cavity is pressed against the product of the other cavity wherein the forming elements in the mold at a temperature below -80C and are cooled with liquid nitrogen. The only difference is '208 does not teach the temperature at which the product is when filled into the cavities or the rotation of the rollers and the instant application does not teach a stick placed within the frozen cavities.

Regarding the temperature at which the product was filled into the cavities, it was known in the art at the time the invention was made for frozen confections to be filled at about -7C. It would have been obvious to one of ordinary skill in the art at the time the invention was made to fill the frozen product into the mold at a temperature that was known in the art and would allow the product to be molded, i.e. would not be too stiff or frozen, but at which the product would not melt. To do so would be routine determination of one of ordinary skill in the art at the time the invention was made and would be a result effective variable based upon the composition of the confection and would not impart a patentable distinction to the claims.



Regarding the rotation speed of the rollers, specifically variable rotational speeds and the rotational speed of the rollers at a stop when the filling device is over a mold cavity and two filled mold cavities face each other, and at a maximal value when the filling device is between two mold cavities, it would have been obvious to one of ordinary skill in the art at the time the invention was made to stop the rollers, i.e. to be at a minimal rotational value, at the same time when the filling device is over a mold cavity and two filled mold cavities face each other so that the mold cavities could be properly filled (i.e. without spillage, to the correct level, ect) and so that the frozen confection material within the mold cavities can solidify and expand to take the shape of the mold cavity. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the maximal rotational value of the rollers to be when the filling device is between two mold cavities, in order to expedite the processing, such that there is minimal lag time between the fillings. One would have been further motivated to vary the rotation speeds depending on the desired degree of filling and pressure in the molding cavity. To do so would be routine practice of one of ordinary skill in the art at the time the invention was made and would not impart a patentable distinction to the claims absent any clear and convincing arguments and/or evidence to the contrary.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments filed October 6, 2009 have been fully considered but they are not persuasive.

Applicant argues that there is no teaching or suggestion in the reference of the confection being allowed to expand. Applicant's argument is not convincing. When referring to Figure 1, Ezaki teaches that there is a space between the sliding surface and the mold cavities (Page 4 lines 15-20), thus teaching that there is space to allow the confection to expand outside the open cavity. Ezaki teaches that the confection "becomes filled" not only the depressions or molds (Figure 1, 17 and 8), but also the

grooves (Figure 1, 26b). Refer specifically to page 9 lines 9-15. Thus, Ezaki teaches that the frozen confection, which includes ice cream, is outside the open cavity prior to the open cavities moving towards one another and closing as recited in claim 1, c and claim 13, c. Furthermore, applicant claims a frozen aerated confection and discloses ice cream as the frozen aerated confection in the specification; applicant claims that the confection is "allowed" to expand and does not require any steps to provoke or excite the expansion; thus, it would be an inherent property of the confection or ice cream to expand when allowed. Since Ezaki teaches of substantially the same type of confection, i.e. an ice cream, as instantly claimed by applicant and teaches that there is sufficient space for the confection to expand, one of ordinary skill in the art at the time the invention was made would expect the confection as taught by Ezaki to expand outside its open cavity as instantly claimed absent any clear and convincing arguments and/or evidence to the contrary. Applicant is reminded that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Additionally, water was known as a primary ingredient in frozen confections, including ice creams, and water was known to expand upon freezing, as the ice cream further solidified in the chilled mold as taught by Ezaki in view of Martinez (as would have been obvious, as discussed above), one of ordinary skill in the art would further expect that the confectionary product expand as instantly claimed. It is unclear as to why applicant believes that the product of Ezaki would not expand.

Applicant argues that Ezaki does not teach of the newly added limitations of the forming elements at below -80C and cooled with liquid nitrogen. Applicant's argument is not convincing as the rejection was made over a combination of references and not over Ezaki alone and as the newly added limitations have been addressed in the rejection above.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KELLY BEKKER whose telephone number is (571)272-2739. The examiner can normally be reached on Monday through Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kelly Bekker/  
Examiner  
Art Unit 1794